

ENGINEERING CLARITY:

Transforming Hearing Aid Fitting with Intuitive Software Solutions

CLIENT OVERVIEW:

Horentek is an Italian hearing aid innovator with a strong international presence, producing 100% Made-in-Italy devices. Driven by values of transparency, credibility, and passion, their mission centers on advancing audiological knowledge and global hearing prevention. They partner with Havana's Institute of Neurosciences, operating Latin America's most advanced audiological center.

THE CHALLENGE:

The client's legacy fitting software suffered from two critical constraints that impeded global audiology workflows:

- Fragmented legacy software requiring excessive clicks for basic navigation
- No role-based access control for different user types (admin/audiologist/developer)
- Missing critical features: Autofit, Tinnitus management, and patient history tracking
- Inability to configure hearing aids for different sound environments
- Lost source code, preventing system upgrades or migrations

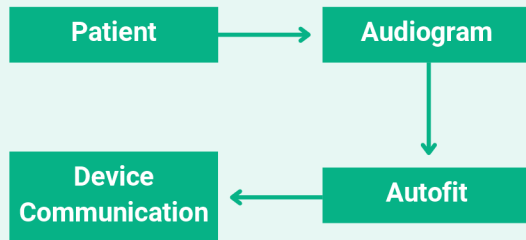
OUR APPROACH:

To address these challenges, we delivered a comprehensive software transformation:



End-to-End Workflow Design:

Created a unified patient journey:



Role-Based Access System:

Implemented tiered logins with specialized permissions:

- Admin: Manages audiologist accounts
- Audiologist: Creates patient profiles and fittings
- Developer: Adds/configures hearing products



Advanced Clinical Capabilities:

Added 6 new features: Autofit, Tinnitus management, Patient History, Data Logging, Attack/Release, Frequency Equalization



Technical Modernization:

Rewrote software using WPF Framework (C#) with OnSemi Rhythm hardware integration



UI/UX Revolution:

- Applied Adobe XD for user-centric interface design
- Implemented navigation principles: User control, cognitive load reduction
- Conducted visual research across leading hearing aid brands



Agile Requirement Delivery:

Implemented 42 client requirements through iterative development

THE BUSINESS IMPACT:

The transformation delivered measurable improvements in audiological care:



Accelerated Clinical Workflows

Eliminated multi-click navigation bottlenecks through intuitive UI design



Enhanced Treatment Capabilities

Enabled Environment-specific hearing configurations for diverse soundscapes



42 Requirements Delivered

Delivered 100% of requested capabilities in a single release



Operational Control

Enabled parallel workflows through role-based access tiers



6 Clinical Features Enabled

Introducing advanced fitting features, including Autofit and Frequency Equalization



Global Standardization

Supported deployment across international clinics, including Havana's advanced audiological center

